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CLAIMS:

What is claimed is:

- 5 1. A keyboard apparatus comprising:
a fabric;
a plurality of switch units coupled to the fabric,
wherein each switch unit within the plurality of switch
units includes:
10 a capsule containing an electrically responsive
liquid, wherein the electrically responsive liquid causes
the capsule to increase in rigidity in response to
application of an electric field to the electrically
responsive liquid;
15 a switch coupled to the capsule, wherein a selected
pressure applied to the capsule activates the switch; and
a plurality of electrical conducting lines connected
to the plurality of switch units.
- 20 2. The keyboard apparatus of claim 1, wherein the
switch is a pizeoelectric-sensative component.
3. The keyboard apparatus of claim 1, wherein the
electrically responsive liquid causes the capsule to
25 expand when an electrical field is applied to the
electrically responsive liquid.
- 30 4. The keyboard apparatus of claim 1, wherein the
fabric is a form of an apron.
5. The keyboard apparatus of claim 1, wherein the

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plurality of switches is coupled to the fabric by being embedded within the fabric.

6. The keyboard of claim 5, wherein the fabric includes
5 a plurality of symbols in locations on the fabric identifying the plurality of switches.

7. The keyboard apparatus of claim 1, wherein a number
of the plurality of switch units have a different
10 rigidity from others in the plurality of switch units when an electric field is applied to the electrically responsive liquid.

8. The keyboard apparatus of claim 1, wherein the
15 electrically responsive liquid is an electrorheological fluid.

9. A keyboard comprising:
a fabric;
20 a plurality of switch units couple to the fabric, wherein each switch unit includes:
a sealed unit containing an electrically responsive liquid;
a switch, wherein the electrically responsive
25 liquid in each switch unit increases in viscosity in response application of an electric field to the electrically responsive liquid; and
a plurality of electrical conducting lines connected to the plurality of switch units and an output
30 configured for connection to a data processing system.

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10. The keyboard of claim 9, wherein the output is a wireless transmitter.

11. The keyboard of claim 9, wherein the output is a universal serial bus connector.

12. A data processing system comprising:
a bus system;
a memory connected to the bus system, wherein a set
of instructions are located in the memory;
a processor unit connected to the bus system,
wherein the processor unit executes instructions; and
a keyboard connected to the bus system, wherein the
keyboard is embedded in a fabric and includes:
a plurality of switch units attached to the
fabric, wherein each switch unit within the plurality of
switch units includes:
a capsule containing an electrically responsive
liquid, wherein the electrically responsive liquid causes
the capsule to increase in rigidity in response to
application of an electric field to the electrically
responsive liquid;
a switch coupled to the capsule, wherein a
selected pressure applied to the capsule activates the
switch; and
a plurality of electrical conducting lines
connected to the plurality of switch units.

13. A pointing apparatus comprising:
a fabric;
a switch unit coupled to the fabric, wherein the

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switch unit:

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a capsule containing an electrically responsive liquid, wherein the electrically responsive liquid causes the capsule to increase in rigidity in response to application of an electric field to the electrically responsive liquid;

10 a plurality of switches coupled to the capsule, wherein a selected pressure applied to a portion of the capsule activates one or more of the plurality of switches.

14. The pointing apparatus of claim 13, wherein activation of one or more of the plurality of switches generates signals to control a pointer on a display of a data processing system.
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15. The pointing apparatus of claim 13, wherein the capsule is in shape of a rectangle.

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